

REMARKS/ARGUMENTS

Applicant has carefully reviewed and considered the Office Action mailed on November 3, 2009, and the references cited therewith.

Claims 1, 6, 12, 16, and 17 are amended, and no claims are canceled or added; as a result, claims 1-17 are now pending in this application.

Applicant respectfully submits that claims 1, 6, 12, 16, and 17 do not introduce any new subject matter and are intended to cover additional claimable subject matter fully supported by the originally filed specification. Support for the amended claim language can be found throughout the specification, and particularly at paragraphs [0032] and [0036]-[0038] and Figures 4-6, for example.

Interview Summary

Applicant thanks the Examiner for the courtesy of a telephone interview conducted on 22 December, 2009. The independent claims were discussed in view of the cited references. The Examiner indicated that the proposed amendment appeared to overcome the current rejections and that further searching would be conducted.

§ 102 Rejection of the Claims

Claims 1-2, 4-6, and 8-16 were rejected under 35 USC § 102(b) as being anticipated by David et al. (U.S. Patent No. 5,948,101; hereinafter David). Applicant has amended the independent claims. Insofar as the rejection still applies, Applicant respectfully traverses as follows.

From Applicant's review, David appears to describe "a method for use in booting a network attached computer" (column 2, lines 23-24). The system of David includes a database 24 having operating system images 33 and 35. At column 4, lines 22-27, David states:

Operating system image 33 is a reduced functionality operation system for initially loading into OMC 37 during the boot process.
Operating system image 35 is a full functionality operation system

for loading into OMC 37 later in the boot process. To note, operating system 33 may be a reduced functionality version of operating system 35, or they may be identical, with operating system 33 utilizing a limited set of operating system resources through use of an initial program that is stored and transmitted therewith.

Further, in connection with Figures 3-6, David states at column 4, lines 34-60:

To begin, OMC 37 is powered-up or reset such that booting thereof begins, STEP 121. OMC 37 reads a bootstrap loader program from ROM 39 and begin (*sic*) executing it. The bootstrap program reads seed letterbug 43 and broadcasts a boot request therewith onto network 15, STEP 123. This boot request is of the same type that CPs 11 use to boot (served by boot server 19 within server 17). However, according to the present invention, instead of transmitting a conventional particularized letterbug, seed letterbug 43 is transmitted. Seed letterbug 43 is a common letterbug to all OMCs using a common processor type (e.g., all OMC compatible with an "Intel" x86 instruction set). As one example, Seed Letterbug 43 is "FCBOOT".

Boot server 19 responds to the boot request using Seed Letterbug 43 by transmitting limited functionality operating system 33 to the requester, i.e., OMC 37, STEP 125 (or, again, a full operating system, with a limited set of resources utilized). Limited functionality operating system 33 executes a predefined program transmitted with it from boot server 19. This program reads information relevant to the boot process from OMC 37. More specifically, head unit serial number 41 and hardware information from OMC 37 are read and sent to OMCLBSVR 31 as part of a letterbug request, STEP 127. The hardware information may include, e.g., memory capacity, I/O cards installed, processor speed, firmware versions, etc.

By so stating, David appears to describe a system in which an operating system 33 is transmitted to a requesting server (e.g., OMC 37) and that operating system reads the head unit serial number 41 and hardware information (e.g., memory capacity, I/O cards installed, processor speed, firmware versions, etc.). The head unit serial number 41 and hardware information is then provided back to server 17, which can then retrieve a fully functional operating system image 35 from its database 24 and transmit image 35 back to OMC 37.

In contrast, Applicant's currently amended independent claim 1 recites:

- booting the target computer in a pre-operating system environment;
- collecting configuration information for the target computer prior to transmitting any operating system image to the target computer from a predetermined server;
- transmitting the configuration information to the predetermined server;
- searching a database in the server for a pre-existing operating system image corresponding to the configuration information from the target computer;
- if a corresponding operating system image is found, transferring the pre-existing operating system image to the target computer; and
- installing the pre-existing operating system image on the target computer.

Applicant's currently amended independent claim 6 recites:

- at least one target computer configured to respond to initialization by requesting a network address for communication over the network, respond to receiving the network address by requesting a boot file over the network, respond to receiving the boot file by executing the boot file in a pre-operating system environment to create a client agent, where the client agent is configured to perform an inventory of the target computer to collect configuration data and transmit the configuration data in a request for an operating system image to a predetermined server, wherein the client is configured to perform the inventory and to collect configuration data of the target computer prior to transmitting any operating system image to the target computer from the predetermined server;

- the client agent being further configured to receive an operating system image and, responsive thereto, install the operating system image on the target computer and execute the operating system;

- a network address server configured to monitor the network for the request for a network address and, responsive thereto, allocate the network address for communication over the network and return it to the requesting device;

- a boot server configured to monitor the network for the request for the boot file and, responsive thereto, transmit the boot file to the requester; and

- an operating system management server configured to monitor the network for the request for an operating system image.

receive the request along with the configuration data, use the configuration data to search for a corresponding operating system image and, if the corresponding operating system image is found, transmit the corresponding operating system image to the target computer.

Applicant's currently amended independent claim 12 recites:

booting a target computer in a pre-operating system environment;

collecting policy criteria data for the target computer prior to transmitting any operating system image to the target computer from an operating system management server;

transmitting the policy criteria data to the operating system management server;

providing policy data defining a relationship between specific policy criteria data instances and operating system image instances;

resolving an appropriate operating system image for the target computer based on the policy criteria data from the target computer and the policy information; and

transmitting to the target computer an operating system object identifier corresponding to the resolved operating system image.

Also, Applicant's currently amended independent claim 16 recites:

means for collecting configuration information for the target computer in a pre-operating system environment, wherein the configuration information for the target computer is collected prior to transmitting any operating system image to the target computer from a predetermined server;

means for requesting download of an operating system image that corresponds to the configuration information for the target computer;

means for identifying an operating system image that corresponds to the configuration information from the target computer;

means for downloading an operating system image that corresponds to the configuration information from the target computer if the corresponding operating system image is found; and

means for installing and executing the corresponding operating system image on the target computer.

As such, Applicant respectfully submits that David does not teach or suggest each and every element provided in currently amended independent claims 1, 6, 12, and 16. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 102 rejection of claims 1, 6, 12, and 16, as well as those claims depending therefrom.

§103 Rejection of the Claims

Claims 3, 7, and 17 were rejected under 35 USC § 103(a) as being unpatentable over David et al. (U.S. Patent No. 5,948,101; hereinafter David) in view of Burkhardt et al (U.S. Patent No. 6,993,642; hereinafter Burkhardt).

Claims 3 and 7 depend from independent claims 1 and 6, respectively. For at least the reasons stated above, Applicant respectfully submits that David does not teach or suggest each and every element provided in independent claims 1 and 6, as currently amended. From Applicant's review, Burkhardt does not cure the deficiencies of David.

Burkhardt appears to describe a system that "creates a reduced operating system (OS) image from an installation OS image." (column 1, lines 62-63).

Burkhardt further states:

a user, such as an original equipment manufacturer (OEM) of personal computers (PCs), selects a set of OS components from a plurality of OS components available in the installation OS image. The selected set of OS components is installed as the reduced OS image on a computer readable medium (CRM) such as a CD-ROM. The reduced OS image includes a script for interacting with the reduced OS image to perform functions desired by a user, such as displaying a command prompt, installing a reference OS image, or recovering from a failed installation of the reference OS image (column 1, line 64 to column 2, line 7).

From Applicant's review, David and Burkhardt, alone or in combination, do not teach each and every element provided in Applicant's independent claims 1, 6, and 17. For instance, David and Burkhardt do not teach or suggest:

booting the target computer in a pre-operating system environment;
collecting configuration information for the target computer prior to transmitting any operating system image to the target computer from a predetermined server;
transmitting the configuration information to the predetermined server;
searching a database in the server for a pre-existing operating system image corresponding to the configuration information from the target computer;
if a corresponding operating system image is found, transferring the pre-existing operating system image to the target computer; and
installing the pre-existing operating system image on the target computer

as recited in independent claim I, as currently amended. Also, David and Burkhardt do not teach or suggest:

at least one target computer configured to respond to initialization by requesting a network address for communication over the network, respond to receiving the network address by requesting a boot file over the network, respond to receiving the boot file by executing the boot file in a pre-operating system environment to create a client agent, where the client agent is configured to perform an inventory of the target computer to collect configuration data and transmit the configuration data in a request for an operating system image to a predetermined server, wherein the client is configured to perform the inventory and to collect configuration data of the target computer prior to transmitting any operating system image to the target computer from the predetermined server;

the client agent being further configured to receive an operating system image and, responsive thereto, install the operating system image on the target computer and execute the operating system;

a network address server configured to monitor the network for the request for a network address and, responsive thereto, allocate the network address for communication over the network and return it to the requesting device;

a boot server configured to monitor the network for the request for the boot file and, responsive thereto, transmit the boot file to the requester; and

an operating system management server configured to monitor the network for the request for an operating system image, receive the request along with the configuration data, use the configuration data to search for a corresponding operating system image and, if the corresponding operating system image is found, transmit the corresponding operating system image to the target computer

as recited in independent claim 6, as currently amended.

Additionally, David and Burkhardt do not teach or suggest:

booting the target computer in a pre-operating system environment;

collecting configuration information for the target computer prior to transmitting any operating system image to the target computer from a predetermined server;

transmitting the configuration information to the predetermined server;

searching a database in the server for a set of pre-existing operating system images corresponding to the configuration information from the target computer;

for each one of the operating system images in the set, if the operating system image is not found, then running an install script on the target computer to construct an operating system for the target computer, imaging the operating system constructed on the target computer, uploading the constructed operating system image from the target computer to the predetermined server, and storing the constructed operating system image and the configuration data in the database in the server

as recited in independent claim 17, as currently amended.

As such, Applicant respectfully submits that David and Burkhardt, alone or in combination, do not teach each and every element provided in Applicant's independent claims 1, 6, and 17. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 103 rejection of claims 3 and 7, which depend from independent claims 1 and 6, respectively, and of independent claim 17.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney Jake Kern at (612) 236-0125 to facilitate prosecution of this matter.

At any time during the pendency of this application, please charge any additional fees or credit overpayment to the Deposit Account No. 08-2025.

CERTIFICATE UNDER 37 CFR §1.8:

The undersigned hereby certifies that this correspondence is being electronically filed with the United States Patent and Trademark Office on this 5th day of


January, 2010.

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